Various changes and modifications can be made to the invention, and it is intended to include all such changes and modifications as come within the scope of the invention as is set forth in the following claims.

What is claimed is:

/1. A composite intraluminal device comprising:

an elongate radially expandable tubular stent having an interior luminal surface and an opposed exterior surface extending along a longitudinal stent axis; and

a stent cover positioned about the stent and which is formed of unsintered ePTFE which is expandable upon said radial expansion of said stent,

wherein said stent covering includes an elongate segment of said unsintered ePTFE having an original longitudinal expanse, said segmnent being expanded in a transverse direction so as to reduce said original longitudinal expanse, said segment being positioned generally transverse to said longitudinal stent axis, and being expandable longitudinally upon said radial expansion of said stent to return said expanded segment to said original longitudinal expanse to thereby control said radial expansion of said stent.

2. A composite intraluminal device of claim 1 wherein said stent is radially expandable from a first compressed state permitting intraluminal delivery to a second expanded state permitting intraluminal deployment.

3. A composite intraluminal device of claim 1 wherein said elongate segment is generally uniaxially oriented along said original longitudinal expanse.

4. A composite intraluminal device of claim 1 wherein said segment is joined about said stent along a seam formed by opposed overlapped transverse ends of said segment.

5. A method of forming an intraluminal device comprising the steps of:

providing an elongate radially expandable tubular stent;

forming a stent cover from a longitudinal segment of unsintered EPTFE having a first longitudinal expanse and a transverse expanse,

expanding said segment along said transverse expanse to provide a second transverse expanse greater than said first transverse expanse and a second longitudinal expanse less than said first longitudinal expanse; and

applying said expanded segment about said stent, with said second transverse expanse extending longitudinally along said elongate stent.

6. A method in accordance with claim 5 wherein said applying step includes wrapping said cover exteriorly about said stent.

7. A method in accordance with claim 6 wherein said wrapping step further includes:

overlapping opposed longitudinal of said stent cover.

8. A method in accordance with claim 7 further including the step of:

securing said overlapped longitudinal ends of said stent cover together.

9. A method of claim 8 wherein said securing step includes:

adhesively securing said overlapped longitudinal ends.

10. A method in accordance with claim 8 wherein said securing step includes:

compressively securing said overlapped longitudinal ends.

11. A method in accordance with claim 6 wherein said wrapping step includes:

wrapping said expanded segment about said stent with said second longitudinal expanse extending generally transverse to said elongate stent.

12. An intraluminal stent assembly comprising:

a radially expandable stent having a longitudinal stent axis;

a stent cover positioned about said stent and being formed of a generally uniaxially oriented polymer, said stent cover being oriented in a first direction and expanded in a second direction transverse to said first so as to decrease the length of said stent cover from its original length, said longitudinal axis of said stent being aligned with said second direction, so that said stent cover is

expandable in said first direction to its original length upon said radial expansion of said stent to control said radial expanse of said stent.

13. A stent assembly of claim 12 wherein said expanded stent cover is expandable in its first direction up to its original length.

14. A stent assembly of claim 13 wherein said uniaxially oriented polymer includes unsintered ePTFE.

* * * * *

15. A composite intraluminal device comprising:

an elongate radially expandable tubular stent having an interior luminal surface and an opposed exterior surface extending along a longitudinal stent axis; and

an elongate stent cover applied longitudinally about the stent and which is formed of unsintered ePTFE having a longitudinal expanse and a transverse expanse as applied to said stent and which is expandable along said transverse expanse from said applied transverse expanse upon radial expansion of said stent.

16. A composite intraluminal device of claim 15 wherein said stent is radially expandable from a first state permitting intraluminal delivery to a second expanded state defining intraluminal deployment.

17. A composite intraluminal device of claim 16 wherein said stent cover is applied about said stent in said first state and is expandable along said transverse expanse upon expansion of said stent to said second state.

18. A composite intraluminal device of claim 17 wherein said stent cover is joined about said stent along a seam formed by opposed overlapped longitudinal edges thereof.

19. A composite intraluminal device of claim 18 wherein said seam is formed by compression of said overlapped edges.

20. A composite intraluminal device of claim 18 wherein said seam is formed by adhesively joining said overlapped edged.

21. A composite intraluminal device of claim 17 wherein said stent cover is generally uniaxially oriented along the longitudinal direction.